

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 200.8

Client ID:	M116125A Lg Tank	Client:	Alaskan Copper Works
Date Received:	04/05/07	Project:	% of Acid, PO# M116125, F&BI 704056
Date Extracted:	04/09/07	Lab ID:	704056-01 x10,000
Date Analyzed:	04/09/07	Data File:	704056-01 x10,000.087
Matrix:	Aqueous	Instrument:	ICPMS1
Units:	ug/L (ppb)	Operator:	HR

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Germanium	68	60	125
Indium	71	60	125
Bismuth	110	60	125

Analyte:	Concentration ug/L (ppb)
Chromium	13,400,000
Nickel	13,100,000
Copper	1,910,000
Zinc	<50,000
Arsenic	12,900
Silver	<10,000
Cadmium	<10,000
Lead	<10,000
Iron (screen)	54,600,000

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 200.8

Client ID:	M116125B Sm Tank	Client:	Alaskan Copper Works
Date Received:	04/05/07	Project:	% of Acid, PO# M116125, F&BI 704056
Date Extracted:	04/09/07	Lab ID:	704056-02 x5000
Date Analyzed:	04/09/07	Data File:	704056-02 x5000.086
Matrix:	Aqueous	Instrument:	ICPMS1
Units:	ug/L (ppb)	Operator:	HR

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Germanium	65	60	125
Indium	70	60	125
Bismuth	109	60	125

Analyte:	Concentration ug/L (ppb)
Chromium	846,000
Nickel	1,640,000
Copper	985,000
Zinc	<25,000
Arsenic	<5,000
Silver	<5,000
Cadmium	<5,000
Lead	7,540
Iron (screen)	5,900,000

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 200.8

Client ID:	Method Blank	Client:	Alaskan Copper Works
Date Received:	Not Applicable	Project:	% of Acid, PO# M116125, F&BI 704056
Date Extracted:	04/09/07	Lab ID:	I7-121 mb
Date Analyzed:	04/09/07	Data File:	I7-121 mb.034
Matrix:	Aqueous	Instrument:	ICPMS1
Units:	ug/L (ppb)	Operator:	HR

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Germanium	89	60	125
Indium	87	60	125
Bismuth	101	60	125

Analyte:	Concentration ug/L (ppb)
Chromium	<1
Nickel	<1
Copper	<1
Zinc	<5
Arsenic	<1
Silver	<1
Cadmium	<1
Lead	<1
Iron (screen)	<500

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ENVIRONMENTAL CHEMISTS

Date of Report: 04/12/07

Date Received: 04/05/07

Project: % of Acid, PO# M116125, F&BI 704056

Date Extracted: 04/12/07

Date Analyzed: 04/12/07

**RESULTS FROM THE ANALYSIS OF AQUEOUS SAMPLES
FOR SPECIFIC GRAVITY
@ 15.56 C**

Sample ID

Laboratory ID

Specific Gravity

M116125A Lg Tank

704056-01

1.24

M116125B Sm Tank

704056-02

1.07

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 04/12/07

Date Received: 04/05/07

Project: % of Acid, PO# M116125, F&BI 704056

Date Analyzed: 04/05/07

**RESULTS FROM THE ANALYSIS OF AQUEOUS SAMPLES
FOR PERCENT ACID**

Sample ID
Laboratory ID

Percent Acid

M116125A Lg Tank
704056-01

10.7

M116125B Sm Tank
704056-02

6.5

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 04/12/07

Date Received: 04/05/07

Project: % of Acid, PO# M116125, F&BI 704056

QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF AQUEOUS SAMPLES FOR TOTAL METALS USING EPA METHOD 200.8

Laboratory Code: 703324-01 (Duplicate)

Analyte	Reporting Units	Sample Result	Duplicate Result	Relative Percent Difference	Acceptance Criteria
Chromium	ug/L (ppb)	<1	<1	nm	0-20
Nickel	ug/L (ppb)	<1	1.07	nm	0-20
Copper	ug/L (ppb)	1.85	1.81	2	0-20
Zinc	ug/L (ppb)	8.15	7.97	2	0-20
Arsenic	ug/L (ppb)	1.06	1.00	6	0-20
Silver	ug/L (ppb)	<1	<1	nm	0-20
Cadmium	ug/L (ppb)	<1	<1	nm	0-20
Lead	ug/L (ppb)	<1	<1	nm	0-20

Laboratory Code: 703324-01 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result	Percent Recovery MS	Acceptance Criteria
Chromium	ug/L (ppb)	20	<1	94	50-150
Nickel	ug/L (ppb)	20	<1	98	50-150
Copper	ug/L (ppb)	20	1.85	91	50-150
Zinc	ug/L (ppb)	50	8.15	91	50-150
Arsenic	ug/L (ppb)	10	1.06	99	50-150
Silver	ug/L (ppb)	5	<1	100	50-150
Cadmium	ug/L (ppb)	5	<1	105	50-150
Lead	ug/L (ppb)	10	<1	104	50-150

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Chromium	ug/L (ppb)	20	91	70-130
Nickel	ug/L (ppb)	20	98	70-130
Copper	ug/L (ppb)	20	94	70-130
Zinc	ug/L (ppb)	50	88	70-130
Arsenic	ug/L (ppb)	10	96	70-130
Silver	ug/L (ppb)	5	99	70-130
Cadmium	ug/L (ppb)	5	95	70-130
Lead	ug/L (ppb)	10	96	70-130

nm - The analyte was not detected in one or more of the duplicate analyses. Therefore, calculation of the RPD is not applicable.

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 04/12/07

Date Received: 04/05/07

Project: % of Acid, PO# M116125, F&BI 704056

**QUALITY ASSURANCE RESULTS
FOR THE ANALYSIS OF AQUEOUS SAMPLES
FOR SPECIFIC GRAVITY
@ 15.56 C**

Laboratory Code: 704056-02 (Duplicate)

Analyte	Sample Result	Duplicate Result	Relative Percent Difference	Acceptance Criteria
Specific Gravity	1.07	1.06	0.8	0-2

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 04/12/07

Date Received: 04/05/07

Project: % of Acid, PO# M116125, F&BI 704056

**QUALITY ASSURANCE RESULTS
FROM THE ANALYSIS OF AQUEOUS SAMPLES
FOR PERCENT ACID**

Laboratory Code: 704056-02 (Duplicate)

Analyte	Sample Result	Duplicate Result	Relative Percent Difference	Acceptance Criteria
Percent Acid	6.48	6.22	4	0-20

704056.

SAMPLE CHAIN OF CUSTODY

ME 04/05/07

A15

Send Report To Gerald Thompson
 Company Alaskan Copper works
 Address 628 S. Harbor St
 City, State, ZIP Seattle WA 98134
 Phone # 206-571-6033 Fax # 206-382-4309

SAMPLERS (signature) <u>[Signature]</u>	
PROJECT NAME/NO. <u>% of Acid</u>	PO # <u>M116125</u>
REMARKS <u>Please See</u>	

Page # _____ of _____
TURNAROUND TIME <input type="checkbox"/> Standard (2 Weeks) <input checked="" type="checkbox"/> RUSH <u>9 days</u> Rush charges authorized by: _____
SAMPLE DISPOSAL <input type="checkbox"/> Dispose after 30 days <input type="checkbox"/> Return samples <input type="checkbox"/> Will call with instructions

Sample ID	Lab ID	Date	Time	Sample Type	# of containers	ANALYSES REQUESTED										Notes
						TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260	SVOCs by 8270	HFS	% of Acid	Spec. Gravity	Al Cu Zn	SEASAG CDB	
M116125A LG Tank	01	4/5/07	10:00	HNO3	1							X	X	X	X	
M116125B Sm Tank	02	4/5/07	10:00	HNO3	1							X	X	X	X	

Friedman & Bruya, Inc.
 3012 16th Avenue West
 Seattle, WA 98119-2029
 Ph. (206) 285-8282
 Fax (206) 283-5044

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by: <u>[Signature]</u>	<u>G. Thompson</u>	<u>ACW</u>	<u>4/5/07</u>	<u>11:10</u>
Received by: <u>[Signature]</u>	<u>Nhan Phan</u>	<u>FEBI</u>	<u>4/5/07</u>	<u>11:10</u>
Relinquished by:				
Received by:				

Samples received at 19 °C

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

James E. Bruya, Ph.D.
Charlene Morrow, M.S.
Yelena Aravkina, M.S.
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3012 16th Avenue West
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TEL: (206) 285-8282
FAX: (206) 283-5044
e-mail: fbi@isomedia.com

April 12, 2007

Gerry Thompson, Project Manager
Alaskan Copper Works
628 South Hanford
Seattle, WA 98134

Dear Mr. Thompson:

Included are the results from the testing of material submitted on April 5, 2007 from the % of Acid, PO# M116125, F&BI 704056 project. There are 8 pages included in this report. Any samples that may remain are currently scheduled for disposal in 30 days. If you would like us to return your samples or arrange for long term storage at our offices, please contact us as soon as possible.

We appreciate this opportunity to be of service to you and hope you will call if you should have any questions.

Sincerely,

FRIEDMAN & BRUYA, INC.



Michael Erdahl
Project Manager

Enclosures
ACU0412R.DOC